UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,628	12/08/2000	Masato Higashi	43890-448	3423

7590   04/19/2005

Mcdermott Will & Emery
600 13th Street NW
Washington, DC 20005-3096

EXAMINER
RIMELL, SAMUEL G

ART UNIT	PAPER NUMBER
2165	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/673,628	HIGASHI, MASATO
Office Action Summary	Examiner	Art Unit	
	Sam Rimell	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-12,14 and 15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8, 10-12, 14-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10-12 and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by

Machida (U.S. Patent 6,209,060).

Claim 1: FIG. 1 illustrates a computer system. The computer system is composed of a

plurality of disk devices (30-1 through 30-n). FIGS. 6-7 illustrate an updating program that

updates firmware from a reference disk to a replaced disk.

The updating occurs in response to turning on a power source. In one respect, the

updating must occur after the power is turned on, so it considered to be occurring in response to

turning on the power. In a second respect, the updating occurs after a physical disk has failed

and been replaced (col. 8, lines 57-67). The updating steps occur "at first, after a disk has been

replaced", beginning with step S1-S2 in FIG. 6 (col. 8, line 6). This illustrates that the updating

program is the first operation that occurs after the power is on.

Step S5 of FIG. 6 is further detailed in FIG. 7, and shows that that the updating of

firmware is performed after the a parameter (version number) of the reference disk is compared

to a version number of the replaced disk (steps S15-S17). If the version number of the reference

disk is higher, the firmware is updated to the replaced disk (steps S5 through S8 of FIG. 6).

Claim 2: FIGS. 6-7 illustrate method steps for updating firmware in a system having a

plurality of disk devices (FIG. 1, disks 30-1 through 30-n).

Step S1 is the starting step. In one respect, the updating must inherently occur after the power is turned on, so it occurs in response to the power being turned on. In a second respect, the starting step occurs after a physical disk replacement (col. 8, lines 57-67). Since the starting step S1 occurs "at first" after the disk replacement, it is occurring as the first operation after the power is turned on.

Step S7-S8 involves transmitting the firmware update from the first memory of one of the disk devices (the memory of the reference disk) to a second memory (transfer buffer 107). The second step involves transmitting the firmware update from the second memory (transfer buffer 107) to the updated disk (replaced disk). The second memory can further receive additional updated firmware when additional disks are to be updated.

Claim 3: As seen in FIG. 5, each disk has stored specific information.. This specific information includes a model name (Type A), and revision number showing a version of the firmware (version number 0003, for example). As seen in step S16 in FIG. 7, the programming assures that the latest revision number is applied to the replaced disk. The actual transmission of the latest revision is accomplished at steps S7-S8 in FIG. 6.

Claim 4: As seen in FIG. 5, the specific information for each disk includes a model name (Type A) and version number (version number 0003, for example). In following the steps of FIGS. 6-7, the reference disk will have a different revision number than the replaced disk. At the same time, model numbers of the disks may be the same (FIG. 5 and col. 8, lines 36-37).

Claim 5: See remarks for claim 4. Note that version numbers fall within a revision number range from 0001 to 0003 (See FIGS. 8A-8D which illustrates the ranges of revision numbers).

Claim 6: See remarks for claim 4. Note that the updated firmware will have the latest revision number (steps S15 through S17 of FIG. 7) as well as be within a range of revision numbers (FIGS. 8A-8D).

Claim 7: The program steps of FIGS. 6-7 are invoked when the system is on.

Claim 8: FIG. 1 illustrates a computer system. FIGS. 6-7 is an update program for updating firmware of the disk devices.

The update program is initiated in response to turning on the power. See the remarks in the second paragraph of the discussion of claims 1 and 2 to illustrate this feature.

The disk themselves define first memory. The buffer (107) is second memory. The updated firmware is transmitted from the reference disk to the second memory (buffer memory 107) and then from the second memory (buffer memory 107) to a replaced disk.

Claim 10: As seen in FIG. 7, the system compares a parameter (version number) of the reference disk to a parameter (version number) of the replaced disk. If the version number of the reference disk is higher, the version on the reference disk is transmitted to the replaced disk.

Claim 11: See remarks for claim 10.

Claim 12: The second memory is the transfer buffer 107 shown in S7 of FIG. 6 and stores the firmware while it is being transferred to the replaced disk.

Claims 14-15: FIG. 1 illustrates a computer system having a plurality of disk devices (30-1 through 30-n) each of which storing firmware (31-1 through 31-n). FIG. 6 illustrates an updating program for updating the firmware of a replaced disk from a reference disk. S1 is the starting step. FIG. 7 is a breakout of the step S5 in FIG. 6 and illustrates step S16 in which a

determination is made as to whether the replaced disk has the latest version of firmware. If it is not the latest version, the updating proceeds with steps S6 through S8 of FIG. 6.

<u>Remarks</u>

Applicant's arguments have been considered. With respect to the amendment to claims 1, 2 and 8, calling for the update program to be run in response to turning on the power, examiner maintains that this feature is within the teachings on Machida. In particular, see the remarks at the second paragraph of the discussion of claim 1.

With respect to claims 14 and 15, and equally as well for claims 1, 2 and 8, applicant argues that the feature of updating the firmware of the replaced disk does not necessarily have to occur, and as a result, is not necessarily inherent. This argument has been considered, but is not correct. Examiner is not suggesting that updating firmware is an "inherent" feature (i.e. a feature that may occur but is not explicitly taught). Rather, examiner finds that that the Machida reference does explicitly teach the updating step, and clearly illustrates the updating data transfer occurring at steps S7-S8 in FIG. 6. This is not merely an inherent feature, but is an explicitly taught feature in the reference, so any case law pertaining to questions of inherency are not relevant to this feature.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication should be directed to Sam Rimell at

telephone number (571) 272-4084.

Sam Rimell
Primary Examiner
Art Unit 2165